### **UC Irvine**

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#### **Title**

Use of Skip Logic Embedded Within the Electronic Medical Record for Milestone- Based Resident Evaluation

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created the ALiEM Approved Instructional Resources (AIR) series to address these difficulties.

**Objectives:** ALiEM AIR series provides EM residency programs curated SM options for III. The series fulfills Accreditation Council for Graduate Medical Education requirements for III (must monitor and evaluate resident participation, provide faculty oversight, and monitor program effectiveness), by 1) Recruitment of editorial board to evaluate online resource quality; 2) Development of scoring instrument to rate each resource, applying principles of instrument design; and 3) Piloting of series to determine feasibility and user satisfaction.

Curricular Design: Each module begins with a set of articles that are scored by the Executive Board using an internally derived scoring system (Figure 1). Articles are limited to those published within last 12 months. Resident participation is tracked using Google Forms. Residency programs can securely obtain this information through ALiEM.

Impact: This innovation was designed to address the growing need for faculty oversight and quality control for residents who access SM resources for III. As of November 2014, 4 modules are available with 30 participating US residency programs (Figure 2). The most recent module 1-week Google Analytics data had 348 page-views from 167 cities. Studies are in progress to collect validity evidence to further guide scoring instrument use.

Tier 1: BEEM Rater Scale	Score	Tier 2: Content accuracy	Score	Tier 3: Educational Utility	Score	Tier 4: EBM	Score	Tier 5: Referenced	Score
Assuming that the results of this article are valid, how much does this article impact on EM clinical practice?		Do you have any concerns about the accuracy of the data presented or conclusions of this article?		Are there useful educational pearls in this article for residents?		Does this article reflect evidence based medicine (EBM) and thus lack bias?		Are the authors and literature clearly cited?	
Useless information	1	Yes, many concerns from many inaccuracies	1	Low value: No valuable pearls	1	Not EBM based, only expert opinion	1	No	1
Not really interesting, not really new, changes nothing	2		2		2		2		2
Interesting and new, but doesn't change practice	3	Yes, a major concern about few inaccuracies	3	Yes, but there are only a few (1-2) valuable or multiple (>=3) less- valuable educational pearls	3	Minimally EBM based	3		3
Interesting and new, has the potential to change practice	4		4		4		4	Yes, authors and general references are listed (but no in- line references)	4
New and important: this would probably change practice for some EPs	5	Minimal concerns over minor inaccuracies	5	Yes, there are several (>=3) valuable educational pearls, or a few (1-2) KEY educational pearls that every resident should know before graduating	5	Mostly EBM based	5		5
New and Important: this would change practice for most EPs	6		6		6		6		6
This is a "must know" for EPs	7	No concerns over inaccuracies	7	Yes, there are multiple KEY educational pearls that residents should know before graduating	7	Yes exclusively EBM based (unbiased)	7	Yes, authors and in- line references are provided	7
Your Score									

Figure 1.



Figure 2.

## **86** The Patient Experience and High-Fidelity Simulation

*Werner S,* Noeller T / MetroHealth Medical Center, Cleveland, OH

Introduction: The emergency department (ED) version of the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) is coming. In our patient satisfaction surveys, patients treated by residents gave lower patient satisfaction scores. To convey the importance of the patient experience, we developed a patient experience simulation.

**Objectives:** This experience provided residents with the patient perspective of an ED visit in order to fully appreciate the drivers of patient satisfaction.

**Design:** A full-immersion, in-situ simulation was used. The sim was conducted for over two 4 hour periods in the ED, with  $\hat{A}\frac{1}{2}$  of the class in each sim. ED staff was briefed just prior to the sim.

Interns were paired, with one as patient, the other as family member. Patients were provided with background info (motor vehicle collision) (MVC) and chief complaint (knee/neck pain). Patients were immobilized and transported via ambulance to the trauma bay. Family members were separated for registration. Patients were assessed by a doctor of medicine (MD), registered nurse (RN) and medic, and sent to radiology. After simulated films, patients were taken to a hall space and reunited with family.

Patients were given cues to heighten awareness of typical patient needs (You have 10/10 right knee pain, you need meds, you have to void, etc.) An RN and two MDs continued to role-play caregivers, providing test results, etc. Discharge instructions were provided. Each intern completed a Press-Ganey survey. A debrief was held, using survey results and discussion points of the positive and negative aspects, and emotional response to the experience.

**Impact:** Participants overwhelmingly felt this was a powerful sim that heightened awareness of the patient experience. The expressed motivation to address the full array of patient needs including pain relief, privacy, comfort, communication, etc. Residents indicated they would be far more cognizant of these needs based on their own patient experience.

Use of Skip Logic Embedded Within the Electronic Medical Record for Milestone-Based Resident Evaluation

*Marshall J*, Chung A, Welniak T, Saloum D, Gupta K, Weiner C / Maimonides Medical Center, Brooklyn, NY

Background: Adoption of milestones by the Accreditation Council for Graduate Medical Education and American Board of Emergency Medicine represents a major change in the standards by which emergency medicine residents are evaluated. Guidance is limited in regards to the efficacy of available assessment tools used to compare residents against these standards. The ubiquity of electronic medical records (EMR) provides a potentially valuable resource through which program directors relate assessments to specific patient encounters, resulting in a more accurate assessment of the resident's clinical skills.

#### **Objectives:**

- Propose a novel means of milestone assessment utilizing EMR
- Align resident evaluation with patient care
- Accurately measure resident and programwide deficiencies to provide targeted curricular improvement

**Design:** Currently, attending-level mandatory questions in the EMR are necessary to complete a patient encounter. Using our EMR, capable of branching to other questions based on yes/no answers (skip logic), a series of milestone based questions will be added to this section. In 3 clicks, attendings will be able to evaluate resident performance based on each encounter. Each week a different milestone will be evaluated. Data collected over many encounters will ensure real-time evaluation data, but will be collected in a separate database and not part of the patient's record.

**Impact:** Our innovation adds to the evolving process of graduate medical education milestone assessment in two ways: 1) Demonstrate a simple method for integrating formative evaluations into every patient encounter, creating more accurate measures of resident performance. 2) Skip-

logic evaluations provide an intuitive method for faculty to assess resident performance across a broad range of knowledge, behaviors and skills that is more in line with the goals of the Next Accreditation System compared to traditional Likert scale scoring. This method provides more concrete feedback, less range restriction, and allows for easier identification of residents at risk and specific areas of concern.

#### **Curricular Innovations Oral Presentations**

# An Expert Educator Teaching Shift Used as a Method to Assess Milestones in Students

Kman N, Leung C, Hartnett D, Greenberger S, Bachmann D, Way D, Khandelwal S, Martin D / The Ohio State University College of Medicine, Columbus, OH

Background: Our institution implemented a competency-based curriculum in 2011 called the Lead. Serve.Inspire (LSI Curriculum). Coinciding with this is the development and publication of twenty-four competency-based emergency medicine (EM) clerkship milestones for fourth-year medical students. In response to both low student evaluations of our direct observation of competence requirement and the development of these milestones, our clerkship implemented an expert educator shift.

**Educational Objectives:** To use an expert educator teaching shift as a way to improve direct observation of competence and assessment of the newly published medical student milestones in EM.

Curricular Design: One of 3 expert educators

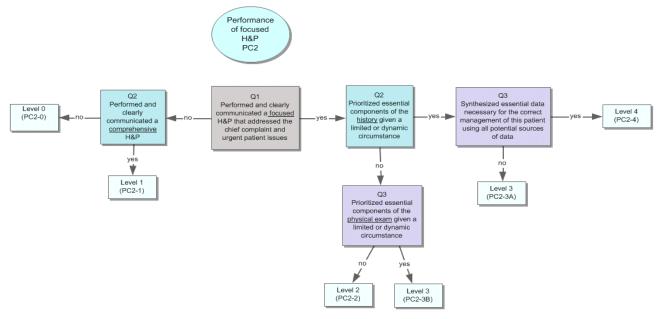


Figure 1.